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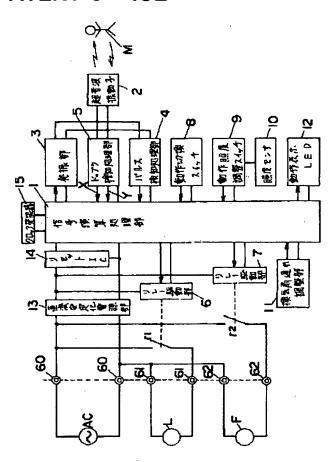
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TITLE

**ULTRASONIC WAVE SWITCH** 



ABSTRACT :

PURPOSE: To provide an ultrasonic wave switch which can detect whether an object to be detected enters, exit, or exists in a specific area using one ultrasonic vibrator.

CONSTITUTION: A signal processing part 1 provides a wave transmission control signal for supplying an ultrasonic wave reference signal to an oscillation part 3 that for supplying it continuously and sets periods for performing Doppler detection and pulse detection. The signal processing part 1 detects the movement of the human which is an object to be detected by Doppler signals X and Y from a Dopper detection processing part 5 during the period of Doppler detection. On the other hand, it reads the reflection wave pattern from a pulse detection processing part 4 during the period of pulse detection and compares it with a fixed environmental value, detects whether a human being is present or not, drives a relay drive part when the human being is moving inside the area of movement detection or exits inside the area of presence detection and lights a lighting L, or performs ventilation operation of an air fan F.

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